

Amendments to the Claims

This listing of claims, if entered, will replace all prior versions and listings of claims in the above-identified application.

Listing of Claims

1. **(Currently Amended)** A method comprising:
 - determining a speculative structure of a database, wherein
 - said determining said speculative structure of said database comprises
 - selecting said speculative structure of said database ~~structure~~
 - from among a plurality of predefined database structures,
 - said database comprises ~~the a~~ plurality of components, ~~and~~
 - said database is stored on a storage volume,
 - said speculative structure of said database ~~[[is]]~~ **comprises** a speculative arrangement of database components,
 - said speculative arrangement is intended to match an actual structure of said database,** and
 - ~~[[an]]~~ **said** actual structure of said database is unknown when said determining is performed;
 - detecting whether said speculative structure of said database matches said actual structure of said database, wherein**
 - said detecting comprises comparing restored data with original data,**
 - said restored data comprises data from a backup copy of said original data, and**
 - said backup copy was formed using said speculative structure of said database;**
 - identifying each of said plurality of components using said speculative structure of said database;
 - selecting a component of said plurality of components;
 - selecting a data management resource of a plurality of data management resources using an attribute of said component; and

- generating a point-in-time image of said component using said data management resource.
2. (Previously Presented) The method of claim 1, further comprising:
performing one or more operations to determine if said speculative structure of said database is equivalent to an actual structure of said database.
 3. (Previously Presented) The method of claim 1, wherein said selecting a component of said plurality of components comprises:
selecting said component of said plurality of components to include within a point-in-time image of said database.
 4. (Previously Presented) The method of claim 1, wherein said selecting a component of said plurality of components comprises:
selecting at least one of a database directory, a table space container, and a redo log directory.
 5. (Previously Presented) The method of claim 1, wherein said selecting a data management resource of a plurality of data management resources comprises:
selecting said data management resource using said attribute of said component and a user-defined policy.
 6. (Previously Presented) The method of claim 1, wherein said selecting a data management resource of a plurality of data management resources comprises:
selecting said data management resource using at least one of a size attribute, a type attribute, a structure attribute, and a location attribute.
 7. (Original) The method of claim 6, wherein said selecting said data management resource of a plurality of data management resources further comprises:
defining a component size range; and
selecting said data management resource in response to a determination that said size attribute is within said component size range.

8. (Previously Presented) The method of claim 1, wherein said selecting a data management resource of a plurality of data management resources comprises:
selecting a point-in-time image creation process.
9. (Original) The method of claim 8, wherein said point-in-time image creation process comprises at least one of: a file-level point-in-time image creation process, a directory-level point-in-time image creation process, a file system-level point-in-time image creation process, a storage device-level point-in-time image creation process, a volume-level point-in-time image creation process, and a volume group-level point-in-time image creation process.
10. (Original) The method of claim 8, wherein said selecting a point-in-time image creation process comprises:
selecting at least one of: a snapshot creation process, a storage checkpoint creation process, and a file copy command, and a backup utility process.
11. (Original) The method of claim 2, further comprising:
restoring said database using said point-in-time image of said component.
12. (Original) The method of claim 11, wherein,
said database is initially stored within a first storage region, and
said restoring comprises,
restoring said database to a second storage region.
13. **(Currently Amended)** An apparatus comprising:
means for determining a speculative structure of a database, wherein
said means for determining said speculative structure of said database
comprises
means for selecting said speculative **database** structure of said
database from among a plurality of predefined database
structures,
said database comprises ~~the~~ a plurality of components,

said speculative structure of said database **[[is]] comprises** a speculative arrangement of database components, and **said speculative arrangement is intended to match an actual structure of said database,**

an actual structure of said database is unknown when said determining is performed;

means for detecting whether said speculative structure of said database matches said actual structure of said database, wherein said detecting comprises comparing restored data with original data, said restored data comprises data from a backup copy of said original data, and said backup copy was formed using said speculative structure of said database;

means for identifying each of said plurality of components using said speculative structure of said database;

means for associating a data management resource with a component of said plurality of components; means for generating a point-in-time image of said component using said data management resource; and

a hardware storage means for storing said database.

14. (Previously Presented) The apparatus of claim 13, further comprising:
means for performing one or more operations to determine if said speculative structure of said database is equivalent to an actual structure of said database.

15. (Previously Presented) The apparatus of claim 13, wherein said means for associating comprises:
means for associating a point-in-time image creation process with said component of said plurality of components.

16. (Previously Presented) The apparatus of claim 13, wherein said means for associating comprises:
- means for associating said data management resource with said component of said plurality of components using an attribute of said component.
17. (Original) The apparatus of claim 16, wherein said means for associating further comprises:
- means for associating said data management resource with said component of said plurality of components using a user-defined policy.
18. (Original) The apparatus of claim 16, wherein said means for associating said data management resource with said component of said plurality of components using an attribute of said component comprises:
- means for associating said data management resource with said component of said plurality of components using at least one of a size attribute, a type attribute, a structure attribute, and a location attribute.
19. (Original) The apparatus of claim 18, wherein said means for associating said data management resource with said component of said plurality of components using an attribute of said component further comprises:
- means for defining a component size range; and
- means for associating said data management resource with said component in response to a determination that said size attribute is within said component size range.
20. (Previously Presented) The apparatus of claim 13, wherein said means for generating comprises:
- means for generating a point-in-time image of said database.
21. (Previously Presented) The apparatus of claim 13, further comprising:
- means for restoring said database using said point-in-time image of said component.

22. (Original) The apparatus of claim 21, wherein,
said database is initially stored within a first storage region, and
said means for restoring comprises,
means for restoring said database to a second storage region.
23. **(Currently Amended)** A program product comprising:
a machine-readable storage medium having a plurality of instructions executable
by a machine embodied therein, wherein said plurality of instructions
when executed cause said machine to:
determine a speculative structure of a database, wherein
said speculative structure of said database is selected from among a
plurality of predefined database structures,
said database comprises ~~the a~~ plurality of components,
said speculative structure of said database ~~[[is]]~~ **comprises** a speculative
arrangement of database components,
**said speculative arrangement is intended to match an actual structure
of said database,**
an actual structure of said database is unknown when said determining is
performed, and
said database is stored on a storage volume;
**detect whether said speculative structure of said database matches said
actual structure of said database, wherein
detecting comprises comparing restored data with original data,
said restored data comprises data from a backup copy of said original
data, and
said backup copy was formed using said speculative structure of said
database;**
identify each of said plurality of components using said speculative structure of
said database;
select a component of said plurality of components;
select a data management resource of a plurality of data management resources
using an attribute of said component; and

generate a point-in-time image of said component using said data management resource.

24. (Previously Presented) The program product of claim 23, further comprising: performing one or more operations to determine if said speculative structure of said database is equivalent to an actual structure of said database.
25. (Previously Presented) The program product of claim 23, wherein selecting a component of said plurality of components comprises:
selecting said component of said plurality of components to include within a point-in-time image of said database.
26. (Previously Presented) The program product of claim 23, wherein selecting a data management resource of a plurality of data management resources comprises:
selecting said data management resource using said attribute of said component and a user-defined policy.
27. (Previously Presented) The program product of claim 23, wherein selecting a data management resource of a plurality of data management resources comprises:
selecting a point-in-time image creation process.
28. **(Currently Amended)** A system comprising:
a first computer-readable storage medium **configured** to store a database;
a point-in-time image utility configured to,
access **said a** first storage element;
determining determine a speculative structure of said database, wherein
said determining said speculative structure of said database
comprises
selecting said speculative **database** structure **of said**
database from among a plurality of predefined
database structures,
said database comprises **the a** plurality of components,

said speculative structure of said database **[[is]] comprises** a
speculative arrangement of database components, and
said speculative arrangement is intended to match an actual
structure of said database,

an actual structure of said database is unknown when said
determining is performed;

detect whether said speculative structure of said database matches

said actual structure of said database, wherein

detecting comprises comparing restored data with original
data,

said restored data comprises data from a backup copy of said
original data, and

said backup copy was formed using said speculative structure
of said database;

identify each of said plurality of components using said speculative
structure of said database;

select a component of said plurality of components;

select a data management resource of a plurality of data management
resources using an attribute of said component; and

generate a point-in-time image of said component using said data
management resource.

29. (Original) The system of claim 28, wherein said point-in-time image utility
comprises:

a memory to store said point-in-time image utility; and

a processor coupled to said memory to execute said point-in-time image utility.

30. (Original) The system of claim 28, further comprising a first node, wherein said
first node comprises said first storage element and said point-in-time image utility.

31. (Original) The system of claim 30, further comprising a second node communicatively coupled to said first node, wherein said second node comprises a second storage element to store said point-in-time image of said component.
32. (Previously Presented) The system of Claim 28, wherein said point-in-time image utility configured to discover a plurality of components is further configured to:
perform one or more operations to verify if said speculative structure of said database is equivalent to an actual structure of said database.
33. (Cancelled)
34. (Cancelled)
35. (Cancelled)
36. (Cancelled)